

AF/IFW

67167-003; 5706-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Eugenio Mannella

Group Art Unit: 3676

Serial No.: 10/797,884

Examiner: Barrett, Suzanne Lale Dino

Filed: 03/10/2004

Title: UNIVERSAL LOCK CYLINDER

M/S After Final
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

In response to the Notice of Non-Compliant appeal Brief dated July 28, 2006, Appellant now submits its corrected Appeal Brief. Appeal Brief fees have already been paid. Any additional fees or credits may be charged or applied to the same Deposit Account.

Real Party in Interest

The real party in interest is Newfrey, LLC, assignee of the present invention.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of Claims

Claims 1-24 are pending and rejected.

Status of Amendments

Appellant's proposed amendments to the claims and specification filed on 16 February 2006 were not entered.

Summary of Claimed Subject Matter

The present invention relates to an uncomplicated mounting arrangement for a core assembly that is readily mounted into multiple lock types. As shown in Figure 2 of the application (reproduced below), one representative embodiment includes a lock housing (12) and a core assembly (14). The core assembly (14) includes a barrel (30) and a plug (32). In this embodiment, a torque plate (38) is received within a rear segment (40) of the plug (32). The rear segment (40) includes a circumferential groove (34) for securing a frustum-conically shaped retainer (42) to retain the torque plate (38) within the rear segment (40).

As shown in Figure 6 of the application (reproduced below), the plug (32) includes a first engagement member (44) and a second engagement member (46), wherein the first engagement member (44) is arranged generally perpendicular to the second engagement member (46). The first and second engagement members (44 and 46) are recessed within the plug (32). As shown in Figure 8 (reproduced below), the torque rod (38) includes a rod portion (54), and a female portion (53) that is of a larger diameter than the rod portion (54). The female portion (53) includes a stepped section (56). When assembled, the female portion (53) is received over the second engagement member (46). [See Specification paragraph 30, page 4]

Figures 11 to 13 of the application (reproduced below) show a second embodiment of the core assembly (14). In this embodiment, the core assembly (14) is engageable with a spindle assembly (60) rather than the torque plate (38) shown in the previous figures. The spindle assembly (60) includes a female portion (62) that engages the plug (32) of the core assembly (14). The female portion (62) is mounted over the first engagement member (44). [See Specification paragraphs 31-34, pages 4-5]

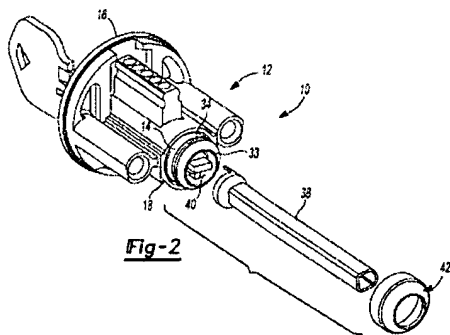


Fig-2

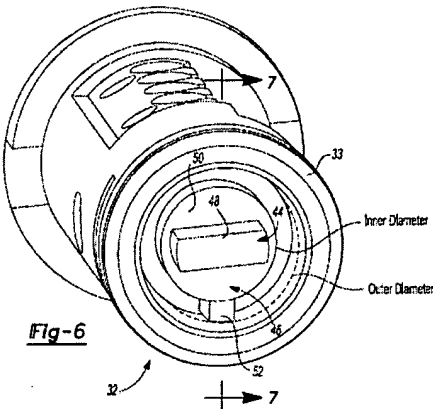


Fig-6

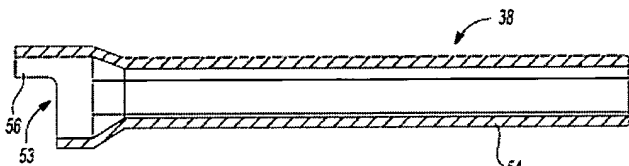


Fig-8

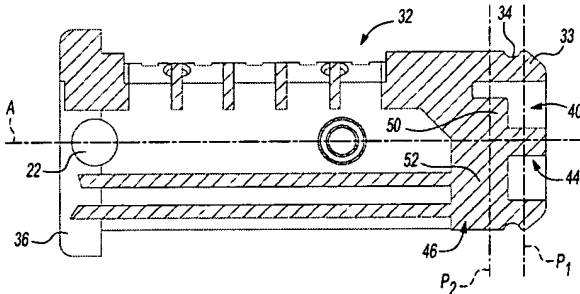


Fig-7

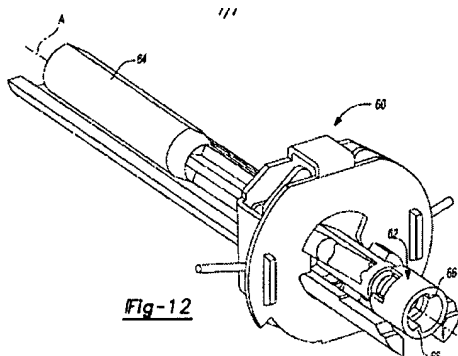


Fig-12

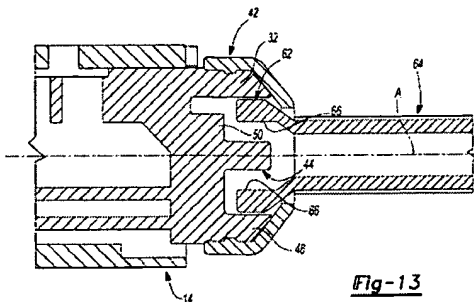


Fig-13

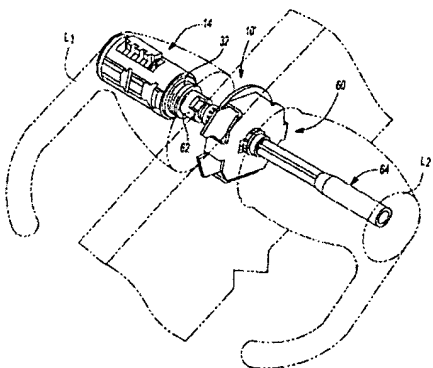


Fig-11

Summary of the independent claims

Independent claim 1 is directed to a lock core assembly (14) that includes a barrel (30) which defines an axis and a plug (32) that is mountable for rotation within the barrel (30) for rotation around the axis relative to the barrel (30). The plug (32) includes a rear segment (40) which defines a first plane (P_1) that is parallel to a second plane (P_2). The first plane (P_1) and the second plane (P_2) are offset along the axis. A first engagement member (44) is at least partially within the first plane (P_1) and a second engagement member (46) is at least partially within the second plane (P_2), with the first engagement member (44) being perpendicular to the second engagement member (46). [See Specification page 4, paragraphs 26 and 27; page 5, paragraph 34; Figures 6, 7, and 13]

Independent claim 11 is similar to claim 1 but additionally recites a lock housing (12) and that the plug (32) includes a male rear segment (44, 46). The claim also recites a torque blade (38) that includes a female end (52) engageable with said male end (44, 46), and a retainer (42) axially retaining the female end (52) over the male end (44, 46). [See Specification page 4, paragraphs 26, 29, and 30; Figure 8]

Independent claim 17 is similar to independent claim 1 but additionally recites a spindle (60) that includes a female end (62) with opposed cams (66) engageable with the male rear segment (40). [See Specification page 5, paragraphs 31-33; Figures 11-13]

Grounds of Rejection to be Reviewed on Appeal

- A. The drawings are objected to because the same reference number has been used to designate different features, for not showing every feature of the invention specified in the claims, and for failing to include reference numbers mentioned in the specification.
- B. Claims 3, 10, 14 and 17-24 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.
- C. Claims 21 and 23 are objected to because of several informalities.

- D. Claims 1, 4, 5-7, 9, 10-13, 15-19, and 21-23 are rejected under 35 U.S.C. §102(b) as being anticipated by *Neary* (4,068,510).
- E. Claims 1-3, 5-7, 9, 11-14, 16-20, 22, and 23 are rejected under 35 U.S.C. §102(b) as being anticipated by *Deckert* (4,444,033).
- F. Claims 8 and 24 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Neary* or *Deckert* in view of *Jacobi* (2,348,135).

Argument

A. Objections to the Drawings

The Examiner rejected the drawings on several grounds. The Appellant submitted corrected drawings (see Appendix, Exhibit A) after final, but the Examiner has not accepted the changes. The Appellant submits that the corrected drawings cure the objections. Accordingly, the amended drawings should be accepted and the objections should be withdrawn.

B. Rejection Under 35 U.S.C. §112, First Paragraph

The Examiner argues that claims 3, 10, 14, and 17-24 contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains to make and use the invention. The Examiner argues that the description on page 5 and the embodiment shown in Figures 11 to 13 is confusing and not clearly understood.

Appellant believes that the rejection stems, at least in part, from the previous objections to the drawings and the Examiner's misunderstanding of the two different example embodiments. It seems that the Examiner's understanding is that the torque blade 38 and the spindle assembly 60 are part of the same embodiment and are attached. However, the torque blade 38 is actually an entirely different embodiment from the spindle assembly 60, and therefore these two components are not shown to be attached together in any of the figures. The revised drawings in combination with the proposed amendments to the specification [see Appendix, Exhibit B "Amendment After Final"] further clarify this point and reasonably describe how to make and use the invention without undue

experimentation. The revised drawings and proposed amendments were not accepted by the Examiner after final. Appellant notes that Figures 1-10 show the embodiment wherein the core assembly 14 is engageable with the torque blade 38, and that Figures 11-13 show the second, different embodiment wherein the core assembly 14 is engageable with the spindle assembly 60 rather than the torque blade 38. Thus, contrary to the Examiner's understanding, it is unnecessary to show how the torque blade 38 and spindle assembly 60 fit together because these refer to two different embodiments. Accordingly, the rejection should be withdrawn.

Regarding claim 3, the Examiner further argues that it is unclear how the stop 52 can define an outer diameter. Claim 3 recites that the stop 52 defines at least a portion of an outer diameter. Proposed amended Figure 6 of the application (reproduced above on page 3) shows the inner diameter and the outer diameter. The first engagement member 44 is circular and represents the inner diameter. The stop 52, which is a part of the second engagement member 46, extends radially outward from the first engagement member 44. As shown by the dashed line, the end of the stop 52 lies on the outer diameter, thereby defining a portion of the outer diameter. Thus, Proposed amended Figure 6 shows how the stop 52 defines at least a portion of the outer diameter, and therefore enables one skilled in the art to make and use the invention. Accordingly, the rejection should be withdrawn.

Regarding claims 14 and 20, the Examiner argues that it is unclear how the second engagement member 46 can have a diameter or define a diameter. Claims 14 and 20 refer generically to the stop 52 as the second engagement member and recite that the second engagement member defines at least a portion of an outer diameter. As explained above, proposed amended Figure 6 shows how the stop 52 defines at least a portion of the outer diameter, and therefore enables one skilled in the art to make and use the invention. Accordingly, the rejection should be withdrawn.

C. Informal Objections

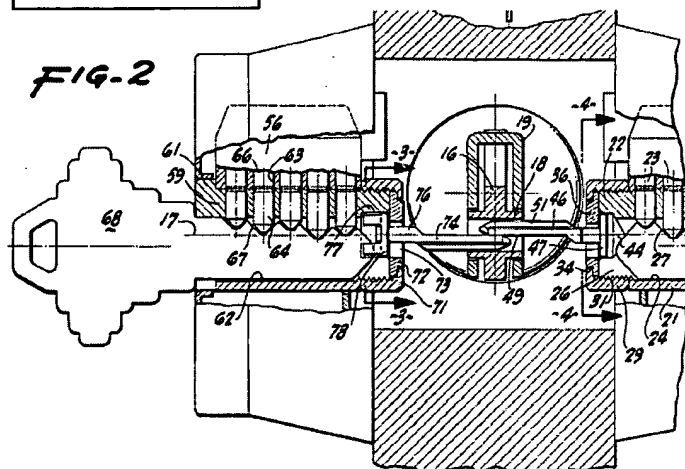
The Examiner objected to claim 21 because there is no antecedent basis for “said male end.” The Examiner objected to claim 23, stating that in line 3, “retaining” should be “retained.” The amendments to the claims proposed after final were not accepted by the Examiner (see Appendix, Exhibit B). In the proposed amendments, claims 21 and 23 are amended to cure the informalities. Accordingly, the amendments should be entered and the objections should be withdrawn.

D. §102(b) Rejection Over *Neary*

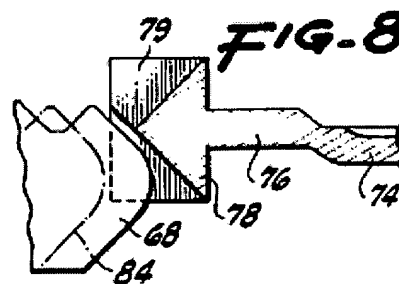
Independent Claims 1, 11, and 17

The Examiner rejected claims 1, 4, 5-7, 9, 10-13, 15-19, and 21-23 under 35 U.S.C. §102(b) as being anticipated by *Neary*. The Examiner contends that *Neary* discloses an assembly having a plug 59, a rear male segment comprising an end of a key 68 shown in Figure 8 (reproduced below), and spindle rods 49 and 74 that receive the key 68.

Neary Figure 2



Neary Figure 8



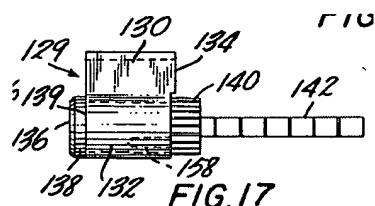
Respectfully, the Appellant disagrees with the Examiner's interpretation. Independent claim 1 recites said plug comprising a rear segment which defines . . . a first engagement member . . . and a second engagement member. Independent claim 11 recites a plug comprising a male rear segment and a torque blade comprising a female end engageable with the male end. Independent claim 17 recites a plug comprising a male rear segment and a spindle comprising a female end engageable with the male rear segment. It is improper for the Examiner to interpret the end of the key 68 of *Neary* as a plug mountable for rotation about an axis relative to the barrel. *Neary* specifically recites that the plug is reference numeral 59 [See col. 4, line 23]. While it is well settled that the terms in the claim are to be given the broadest reasonable interpretation in proceedings before the PTO, this interpretation must be consistent with the specification, with the claim language being read in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1567 (Fed Cir. 1990); *In re Sneed*, 710 f.2d 1544, 1548, 218 USPQ 385, 388 (Fed Cir. 1983). Thus, the Examiner is suggesting an interpretation that specifically contradicts the specification of *Neary*. The plug 59 of *Neary* does not include a first engagement member and a second engagement member, or a male segment

that is engageable with a female end of a torque blade or spindle as in Appellant's claims. Accordingly, the claims are properly allowable and the rejection should be withdrawn.

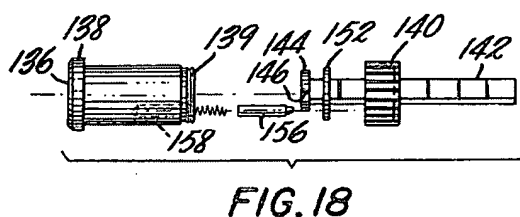
E. §102(b) Rejection Under *Deckert*

The Examiner rejected claims 1-3, 5-7, 9, 11-14, 16-20, 22, and 23 as being anticipated by *Deckert*. Here, the Examiner argues that *Deckert* discloses “a barrel and plug 132 having a rear male segment (at 139, 156, 158 in Figure 18) with a first engagement member (at 139) and second perpendicular engagement member 156 and a spindle rod 142 having a female end 144, 146, 152 (female end is hole and 152 which receives male pin member 156).”

Deckert Figure 17



Deckert Figure 18



Respectfully, as seen in Figure 17, this interpretation has no basis. Although the Examiner interprets the plug as element 132, element 132 is actually the lower cylindrical portion 132 of exterior body 130. [Col. 6, lines 23-24.] As such, what the Examiner interprets as the plug is properly interpreted as the barrel within which the plug is mountable for rotation. Indeed, *Deckert* specifically identifies the plug as element 136 [see col.6, line 20], which further supports Appellant's interpretation. All claims are allowable for this reason alone.

F. §103(a) Rejection Over *Neary* or *Deckert* in View of *Jacobi*

Claims 8 and 24 were rejected under 35 USC §103(a) as being unpatentable over *Neary* or *Deckert* in view of *Jacobi* (2,348,135). The improper interpretations of *Neary* and *Deckert* as described above cannot be rectified through combination with *Jacobi*. The rejections of claims 8

and 24 are therefore improper for at least the reasons discussed above even if the combination itself - - which it is not - - were proper. Claims 8 and 24 are properly allowable and the rejection should be withdrawn.

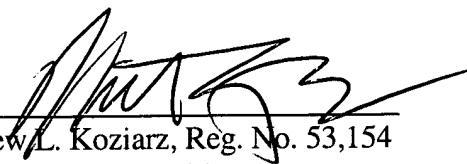
Additionally, there is no motivation to make the proposed combinations. The Examiner argues that it would have been obvious to modify the retainer of either *Neary* or *Deckert* to have a frustum-conical shaped retainer as taught by *Jacobi* as an obvious matter of design choice to prevent tampering by providing an anti-drill sloped surface. Respectfully, Appellant submits that the proposed modification amounts to more than a mere design choice because the modification would change the operation of the base references. For example, in *Neary*, the retainer 71 would not thread onto the plug 59 if the retainer 71 had a frustum-conical shape (see *Neary* Figure 2 on page 7 herein). In *Deckert*, the cutouts 162 of the retainer 140 would be spaced from the tail cam 142 [see col. 6, lines 42-52] and therefore would not engage with the retainer 140 if the retainer 140 had a frustum-conical shape. Therefore, the proposed modifications would change the operation of the references, thereby entailing more than mere arbitrary design choice decision-making.

Additionally, the Examiner argues that the proposed modifications would provide an anti-drill sloped surface. The Examiner provides no basis that the frustum-conical shape of the retainer would provide such a benefit. Furthermore, the Examiner appears to merely be stating a desired result rather than a legitimate reason for modifying the retainers of *Neary* and *Deckert*. For this additional reason, the rejection should be withdrawn.

CLOSING

For the reasons set forth above, the final rejection of claims 1-24 is improper and must be reversed.

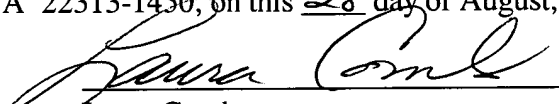
Respectfully submitted,


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Dated: August 28, 2006

CERTIFICATE OF MAIL

I hereby certify that the enclosed Response is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28 day of August, 2006.


Laura Combs

CLAIMS APPENDIX

1. A lock core assembly comprising:
a barrel which defines an axis; and
a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising an rear segment which defines a first plane parallel to a second plane, said first plane and said second plane transverse and offset along said axis, a first engagement member at least partially within said first plane and a second engagement member at least partially within said second plane, said first engagement member perpendicular to said second engagement member.
2. The lock cylinder assembly as recited in claim 1, wherein said second engagement member comprises a stop that extends from a circular member defined at least partially around said axis, said circular member located at least partially within said second plane.
3. The lock cylinder assembly as recited in claim 2, wherein said circular member defines an inner diameter and said stop extends from said circular member transverse to said axis to define at least a portion of an outer diameter.
4. The lock cylinder assembly as recited in claim 1, wherein said rear segment is recessed within said plug.
5. The lock cylinder assembly as recited in claim 1, wherein said plug defines a groove.
6. The lock cylinder assembly as recited in claim 5, further comprising a torque blade comprising a female end engageable with said rear segment.

7. The lock cylinder assembly as recited in claim 6, further comprising a retainer mountable at least partially within said groove, said retainer axially retaining said torque blade to said rear segment.
8. The lock cylinder assembly as recited in claim 7, wherein said retainer is frustum-conically shaped.
9. The lock cylinder assembly as recited in claim 1, further comprising a spindle comprising a female end engageable with said rear segment.
10. The lock cylinder assembly as recited in claim 9, further comprising opposed spindle cams within said female end.
11. A lock assembly comprising:
 - a lock housing;
 - a barrel which defines an axis, said barrel mountable within said housing;
 - a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising a male rear segment;
 - a torque blade comprising a female end engageable with said male end; and
 - a retainer axially retaining said female end over said male end.
12. The lock assembly as recited in claim 11, wherein said male rear segment comprises a first engagement member perpendicular to a second engagement member.
13. The lock assembly as recited in claim 12, wherein first engagement member is axially displaced from said second engagement member.

14. The lock assembly as recited in claim 11, wherein said second engagement member extends from a circular member, said circular member defines an inner diameter and said second engagement member extends from said circular member transverse to said axis to define at least a portion of an outer diameter.

15. The lock assembly as recited in claim 11, wherein said male end is recessed within said plug.

16. The lock assembly as recited in claim 11, wherein said retainer engages a groove defined about said plug.

17. A lock assembly comprising:

a lock housing;

a barrel which defines an axis, said barrel mountable within said housing;

a plug mountable for rotation within said barrel for rotation around said axis relative said barrel, said plug comprising a male rear segment; and

a spindle comprising a female end with opposed cams engageable with said male rear segment.

18. The lock assembly as recited in claim 17, wherein said male rear segment comprises a first engagement member perpendicular to a second engagement member.

19. The lock assembly as recited in claim 18, wherein first engagement member is axially displaced from said second engagement member.

20. The lock assembly as recited in claim 17, wherein said second engagement member extends from a circular member, said circular member defines an inner diameter and said second

engagement member extends from said circular member transverse to said axis to define at least a portion of an outer diameter.

21. The lock assembly as recited in claim 17, wherein said male end is recessed within said plug.

22. The lock assembly as recited in claim 17, further comprising a retainer mountable to said male rear segment, said retainer axially retaining said spindle to said male rear segment.

23. The lock assembly as recited in claim 17, further comprising a retainer mountable to said male rear segment, said retainer mounted at least partially around said female end to axially retaining said spindle to said male rear segment.

24. The lock assembly as recited in claim 22, wherein said retainer is a frustum-conically shaped retainer.

EVIDENCE APPENDIX

Exhibit A: Formal drawings

Exhibit B: Amendment After Final, dated February 16, 2006

RELATED PROCEEDINGS APPENDIX

None.

RELATED APPEALS AND INTERFERENCES APPENDIX

None.